

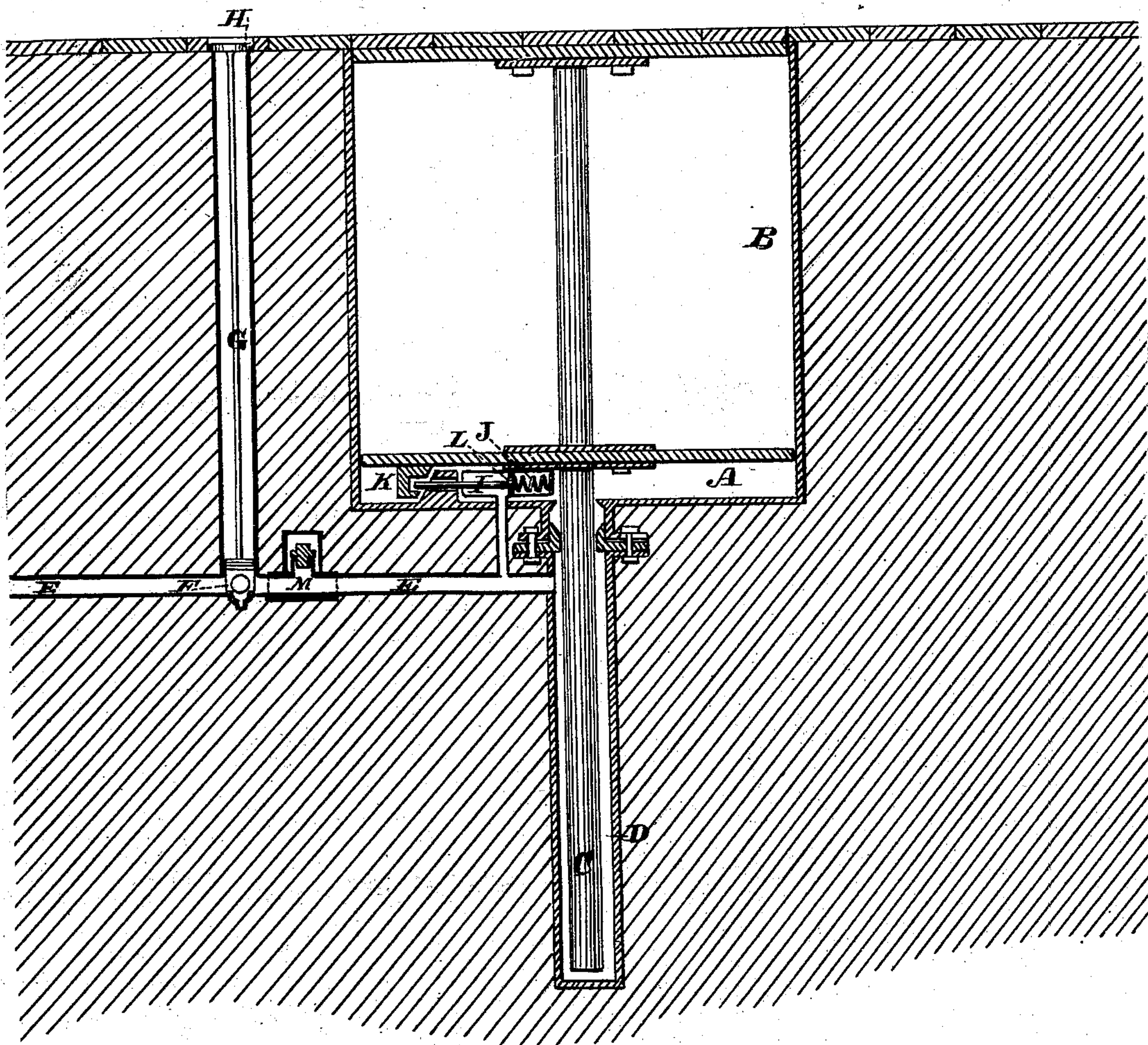
(No Model.)

J. N. LAUTH & O. B. HARDY.

SAFE.

No. 283,120.

Patented Aug. 14, 1883.



Witnesses,

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# UNITED STATES PATENT OFFICE.

JOHN N. LAUTH, OF HOWARD, PENNSYLVANIA, AND ORLANDO B. HARDY,  
OF SAN FRANCISCO, CALIFORNIA.

## SAFE.

SPECIFICATION forming part of Letters Patent No. 283,120, dated August 14, 1883.

Application filed December 5, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN N. LAUTH, of Howard, Centre county, State of Pennsylvania, and ORLANDO B. HARDY, of the city and county of San Francisco, State of California, have invented an Improved Safe; and we hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to certain improvements in safes and other similar depository structures; and it consists in certain details of construction, as will hereinafter be fully described, and specifically pointed out in the claim.

Referring to the accompanying drawing for a more complete explanation of our invention, the figure is a vertical section, showing the safe depressed into the chamber within the masonry, the lock, elevating-ram, and valve.

A is a chamber, which is formed in the earth below the surface, and surrounded by masonry or other suitable substance of considerable thickness and depth. We prefer to build within this structure chilled-iron plates, so as to make it entirely burglar-proof if the masonry should be partly dug away, while the masonry will be sufficient to make it fire-proof. This chamber is sufficiently large to receive the safe B, which is exactly fitted to it, and may be lowered into it or raised above the surface at pleasure.

In constructing this safe, it may be made with comparatively thin walls, as its protection depends upon the inclosing-chamber A, and by making it in this manner it will occupy no unnecessary space when elevated for use. It may also have openings or doors upon more than one side, so that its contents can be easily reached without the necessity of standing room within it, or be without doors at all. The whole of the structure may be made of cheap material and workmanship, except the top of the safe. This should be made thick and heavy, of the best chilled iron and steel, and is also made fire-proof. The joints are made as nearly air and water tight as possible to protect the contents in case of fire, and to prevent the introduction of explosives, so that when the safe has been lowered into the chamber it will be as nearly fire and burg-

lar proof as possible. In order to raise and depress it, any suitable power and mechanism may be employed—as steam, pneumatic, electric, screw, or hydraulic force—with suitable mechanism for operating the same. In the present case we have shown it to be operated by hydraulic pressure.

C is a ram, which extends down into a cylinder, D, and up to the safe, which it supports, and it may be continued up through the interior to the top as a supporting and strengthening spindle, as shown.

Water under pressure may be admitted to the ram through the pipe E by means of the cock F. The pipe and cock are preferably located within the solid masonry, so as to be out of reach, and the cock is controlled by a combination-lock, which must be adjusted before it can be opened. This lock is preferably placed close to the cock and at a considerable distance below the surface, so as to be out of direct reach. A stem, G, extends up to the surface, and the combination is worked from this point by a disk, H.

In order to lock the safe when it is down in the chamber and prevent it from being raised by force, a bolt or bolts, I, are either fixed to the safe-bottom and actuated by springs J, so as to enter corresponding sockets in the walls of the chamber when the safe arrives at the bottom; or the bolts may be stationary at the bottom and the sockets K fixed to the bottom of the safe to travel with it, as shown in the present case. The bolt has a piston, L, upon it, and works within a chamber, so that it may be forced back by pressure upon the piston. This pressure is admitted to the cylinder when the cock is opened to supply the ram, and the first action is to force the bolts back, and thus allow the safe to be free to ascend by the pressure upon the ram.

A supplemental valve or cock, M, is fitted to the pipe, between the cock F and the ram, and this cock is entirely inclosed within the masonry, as it is never to be used, except in case of accident to the main apparatus. The masonry may then be removed until this cock is exposed, and it may be connected with a pressure-pipe, so that the ram may be operated and the safe raised. Desks or cases for books



or libraries may be protected in the same manner, and the vault or chamber may be made of any desired depth for the purpose for which it is to be used.

5 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with a safe raised and lowered by a hydraulic ram, the bolt I, having a piston-head moving in a cylinder and backed by

a spring, the catch K, secured to the safe, and a pipe connecting the water-supply pipe directly with the bolt-cylinder, as set forth.

In witness whereof we hereunto set our hands.

JOHN N. LAUTH.

ORLANDO B. HARDY.

Witnesses:

THEO. REICHERT,

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